PRACTICAL STRATEGIES FOR NURSING **EDUCATION PROGRAM EVALUATION**



LYNNE PORTER LEWALLEN, PhD, RN, CNE, ANEF

Self-evaluation is required for institutions of higher learning and the nursing programs within them. The literature provides information on evaluation models and instruments, and descriptions of how specific nursing education programs are evaluated. However, there are few discussions in the nursing education literature of the practical aspects of nursing education program evaluation; how to get started, how to keep track of data, who to involve in data collection, and how to manage challenging criteria. This article discusses the importance of program evaluation in the academic setting and provides information on practical ways to organize the evaluation process and aggregate data, and strategies for gathering data from students, graduates, alumni, and employers of graduates. (Index words: Program evaluation; Nursing, Nursing education; Accreditation) J Prof Nurs 31:133-140, 2015. © 2015 Elsevier Inc. All rights reserved.

PROGRAM EVALUATION IS one of those activities that administrators of nursing programs know they have to do but do not like to think about. It sometimes seems an additional task—something that is not part of the day-to-day running of the program, and because it seems like extra work, it is often made the last priority. However, in order for program evaluation to be useful, it must be attended to regularly. Data must be collected routinely, and then analyzed and reported, not just filed away. The question is, how can faculty and administrators in nursing programs become motivated to do program evaluation, and how do they start?

Importance of Nursing **Education Program Evaluation**

Internal Drivers

The first step in successful nursing education program evaluation is to understand why this is important. There are both internal and external drivers for nursing education program evaluation. Internal drivers refer to forces within the parent institution and the nursing education program itself, and will be discussed first. Most colleges and universities strive for excellence. As part of assessing progress toward goals of excellence, parent institutions look at their departments and schools for evidence of positive program outcomes as part of assessment of institutional effectiveness. Processes are put in place to

ultimately lead toward outcomes, but processes can often be continued as a matter of routine. Without actually examining outcomes, it is easy to go along with the same behaviors and processes without knowing whether they are effective. Program evaluation thus is important to colleges and universities to ensure that the day-to-day practices are leading to the desired outcomes.

Nursing programs also strive for excellence in both teaching and in the outcomes of their graduates. By conducting program evaluation, we can examine objective data to help in decision making and planning. When a program collects data, it is easier to identify the practices that are effective and those that are not, and easier to identify problem areas. Once problem areas are identified, new strategies can be planned. Program changes are often accepted more readily by faculty and students if they are based on data, so program evaluation can be helpful in providing the rationale for changes. Ultimately, systematic program evaluation and use of the data can improve program outcomes—which is the best internal driver for a program.

External Drivers

There are also external drivers to nursing education program evaluation. Because these are imposed by external bodies, they may be perceived as more urgent than internal drivers. First, the regional accrediting body that accredits the parent institution requires evaluations. Although these accreditors do not examine each individual unit of the college, they require that both the general education requirements of the college and the program outcomes of individual units, including the nursing program, are evaluated (Southern Association of Colleges and Schools, Commission on Colleges, 2012). Second, most nursing programs, especially those leading to initial licensure, must

Professor, School of Nursing, The University of North Carolina at Greensboro, Greensboro, NC. E-mail: lplewall@uncg.edu 8755-7223

be approved by their Boards of Nursing. These boards of nursing, either directly or indirectly through accreditation requirements, require that programs conduct systematic evaluation and show evidence of use of those results (for example, North Carolina Board of Nursing, 2011). Third, many nursing programs are accredited by national nursing accrediting bodies. Both the Accreditation Commission for Education in Nursing (ACEN) and the Commission on Collegiate Nursing Education (CCNE) have standards related to outcomes, and both require that specific areas be evaluated (ACEN, 2013; CCNE, 2013). Programs also must show evidence of acting on the aggregated data.

Getting Started With an Evaluation Plan

Formative and Summative Evaluation

Both formative and summative evaluations are important, and it is essential to evaluate both the program's processes and product. Formative evaluation is conducted for the purposes of improving the program by examining program processes (Fitzpatrick, Sanders, & Worthen, 2011). For example, many nursing programs use preceptors in some courses to assist in clinical teaching. Formative evaluation of this activity could include gathering data about student, faculty, and preceptor satisfaction with the process with the goal of improvement of the process. Summative evaluation, in contrast, involves evaluation of the product with the goal of making a decision about program continuation (Fitzpatrick, Sanders, & Worthen). A common summative evaluation item in nursing education programs is assessing employer satisfaction of the program's graduates. If the graduates are not able to function competently in the workplace, the nursing education program needs to be revised in some way—it should not continue as currently structured.

Regulation and Accreditation Standards

Accrediting bodies typically require that all their standards are evaluated. Currently in the United States, there are two nursing specialty accrediting bodies: the ACEN, which accredits all levels of nursing education and serves as a Title IV gatekeeper, and the CCNE, which accredits baccalaureate and higher degree nursing education programs. ACEN has six standards, with more specific criteria under each standard. The CCNE has four standards, with more specific key elements under each standard. Although the standards for each agency are worded differently, they both require evaluation of administrative support; faculty qualifications and performance; student policies and services; currency and integrity of the curriculum; fiscal, physical, and human resources available to the program; and program outcomes. Table I gives sample indicators that must be evaluated in each of these areas. Program administrators may also want to evaluate other areas important to the program, for instance, the cost-effectiveness of a new course management system, student satisfaction with

hybrid courses, or the scholarly productivity of faculty compared to similar institutions.

Creation of a School's Master Plan for Evaluation

Who and How

Responsibilities for all aspects of program evaluation should be clearly assigned, and a time frame for evaluation clearly stated. Although the nursing program administrator usually is ultimately accountable, all stakeholders in the nursing program, including students, faculty, and staff, should be involved, because they can best evaluate their areas of experience (Ellis & Halstead, 2012). Some schools operationalize this process by establishing evaluation committees composed of faculty from all levels of the program, students, community stakeholders, and staff. Although this encourages wide participation in evaluation activities, the membership of the committee may change, which can lead to lack of continuity. Some schools have reported that the evaluation process is smoother and more a part of the culture when there is one person in charge of evaluation, such as an evaluation coordinator (Sudhayda & Miller, 2006).

Deciding on criteria to include in the master plan for evaluation can be done in several ways. Some schools use evaluation models to determine criteria, and many are available, all with advantages and disadvantages (Stavropoulou & Stroubouki, 2014). Others use criteria from accrediting agencies or Board of Nursing guidelines because these bodies often require that their standards be evaluated in a formal manner. Some colleges or universities require that certain areas be evaluated as part of their master evaluation plans. It is important to get input from stakeholders when developing or revising the master evaluation plan to make sure all key areas are included in the criteria.

Many schools choose to display their evaluation plan in a table format, with headings that include specific evaluation criteria, the responsible party(ies), the time frame for data collection, the method of data collection (for example, a certain instrument), and then columns where evaluation data can be recorded, as well as suggestions for change based on the data. The evaluation coordinator and/or evaluation committee members then systematically go through the plan and document the results of data collection, discussion, and dissemination of the results (if applicable), decisions made based on the results (even if the decision was that no change in an area was needed), and changes needed to improve both the results and the process. Table 2 gives an example of an evaluation table, using a common evaluation criterion.

Data Sources for Evaluation

Documentation is critical in program evaluation. Faculty minutes are an excellent way to document discussions of program evaluation data that lead to program decisions. Minutes of meetings must be detailed enough, however, that an outside reviewer can tell what was

Table 1. Potential Indicators Useful for Program Evaluation

G	eneral evalua	tion indicators		
Area for evaluation	Related ACEN standard	Related CCNE standard	Examples of specific indicators	
Administration	Mission and administrative capacity	Program quality: mission and governance Program quality: institutional commitment and resources	Are mission and philosophy of nursing program consistent with those of the overall college? Is nursing program administrator qualified, and given authority and time to do the job? Does the program seek input from and share information with key stakeholders in the college and the community?	
Faculty	Faculty and staff	Program quality: institutional commitment and resources	Are faculty numbers and qualifications appropriate to meet the need of the nursing program? Do faculty workloads meet college and regulatory body standards, and do they allow time for faculty to accomplish all the components of their role? Are faculty oriented appropriately upon hire and for new expectations Are faculty evaluated according to program policy, and do they have	
Students	Students	Program quality: institutional commitment and resources	access to grievance procedures? Is the information directed to students clear and accurate? Are policies in place to protect and inform students? Do the college and/or nursing program provide services that all	
Curriculum	Curriculum	Program quality: curriculum and teaching-learning practices	students can use, even if they learn using distance education? Does the curriculum reflect appropriate competencies important for practice? Do faculty consistently evaluate and update the curriculum? Do course documents, classroom activities and clinical sites demonstrate that program outcomes can be achieved?	
Resources	Resources	Program quality: institutional commitment and resources	Are clinical resources appropriate for achievement of the program outcomes? Are learning resources, including libraries, classroom, and laboratory space, and technology appropriate and sufficient to achieve program outcomes? Do faculty have access to the equipment and technology necessary to do their job?	
Outcomes	Outcomes	Program effectiveness: assessment and achievement of program outcomes	Have program outcomes been achieved? Are graduates able to become licensed/certified to practice? Are graduates and alumni satisfied with the program? Are employers of your graduates satisfied with the performance of these graduates?	

Note. Data adapted from ACEN (2013) and CCNE (2013) standards.

Table 2. Example of Use of Evaluation Table

Criterion	Responsible party and time frame	Method of data collection	Results	Suggestions for change
85% of graduates will state they have achieved all the program outcomes.	Course coordinator of NUR 264 (last course in program), collected at end of spring semester annually.	Program-developed 15-item survey (which includes items asking about achievement of each of 5 program outcomes).	90% of graduates returned the survey. 80% of respondents stated that they achieved all program outcomes, but 15% stated that they had not achieved program outcome #5 (pertaining to use of evidence-based practice). Results disseminated to faculty (Faculty minutes 9/1/12) and stakeholders (Advisory Board minutes 9/27/12). Faculty task force formed to assess incorporation of content related to use of evidence-based practice in curriculum, first report due 10/30/12.	No changes necessary in evaluation process. Await results of task force analysis for suggested changes in incorporation of use of evidence-based practice into curriculum.

136 LYNNE PORTER LEWALLEN

discussed (Hamner & Bentley, 2003). Aggregated data from an evaluation plan must be discussed according to the timetable set. A decision must be recorded on the basis of this discussion, such as maintenance of the current state of affairs if the data are positive, or plans for change if the data indicate change is needed. Future minutes should then document the beginning of the change, and go on to evaluate the effectiveness of that change. An evaluation plan is a good place to document this chain of events, listing actual dates of minutes of meetings that a reviewer could then read for details. The documentation should show that the evaluation data are collected, aggregated, presented to the appropriate stakeholders, and then used as a basis for decision making.

Some criteria for program evaluation are more challenging than others in regard to data collection. Typically, these are areas where the program has to rely on people outside the program to provide data. Surveys are often used to collect data from students, graduates, alumni, and employers of graduates, but low survey response rates can be a problem. Survey response rates should be recorded on the evaluation plan document, so it is clear whether decisions are made on the basis of a critical mass of data, and whether changes need to be made to the data collection plan to reach more of the target population.

Programs need to monitor response rates, and have plans for reminders to those who have not returned the survey. Differing methods of survey dissemination should be considered, such as electronic surveys or hand-delivered surveys, if traditional mail delivery does not yield an acceptable response rate.

Surveys are often used because they can gather a large amount of data from a large number of people with minimal effort. Survey instruments can be designed by the program or a standardized instrument can be used that compares program data with data from similar programs, such as that offered by EBI Benchmarking Assessments (http://www.webebi.com/assessments/ nursing), which is based on CCNE accreditation standards. The survey instrument must include items that address outcome criteria (Diefenbeck, Hayes, Wade, & Herrman, 2011). When conducting surveys for the purposes of program evaluation, it is important to ascertain that the questions asked match the area being evaluated. For example, if the survey is designed to measure student satisfaction, it is important to actually ask the question about satisfaction and decide how these data will be aggregated when the surveys are returned. For example, if there is a five-item satisfaction survey, will you use a summative score of all items, average the responses to all items, or choose one particular item to serve as the indicator of overall satisfaction? This sounds intuitive, but there have been instances where survey items were not designed with program evaluation in mind, and the data were ultimately not useful to assess important program outcomes.

Sometimes information is needed that does not fit the format of a survey. In such instances, other methods can

be used instead of, or to supplement, a survey. Focus groups can be used to discuss issues not mentioned on quantitative surveys (Giddens & Morton, 2010) and to explore issues in depth. Exit interviews are another method of collecting data, especially for students who leave the program before graduation. Exit interviews are convenient to use when the number of interviewees is too small to make a focus group feasible (Jacobs & Koehn, 2004). For large groups from which some qualitative data are desired, such as for end-of-program evaluations, a sample of graduating students can be randomly selected for in-depth interviews, and others given a survey instrument.

Components of an Evaluation Plan

As illustrated in Table 1, it is helpful for programs to identify specific indicators for each evaluation criterion to collect appropriate data. Each section will be considered separately below.

Administration

Administrative support for the nursing education program from the parent institution must be assessed. This includes both support for the nurse administrator to administer the program and fiscal support for the program. Documentation of the process of budget development, including input from nursing, should be included. In addition, it is helpful to create tables comparing budget allocations between nursing and other units on campus to assess equity. Assessment of nonnursing faculty and staff often falls in this category, including both qualifications and adequacy of numbers. Qualifications of the nurse administrator in relation to regulatory and accreditation requirements should also be documented. Curriculum vitae and job descriptions are examples of documentation in this area.

Faculty

Faculty qualifications and adequacy of number of faculty are key areas for data collection. Accrediting and regulatory bodies have specifications about types of faculty qualifications and faculty/student ratios, which must be assessed. Also important, though, is information about faculty competency and scholarship. Data to be collected might include workload summaries, information about continuing education sessions or conferences attended by faculty, and information from faculty annual personnel reports about committee assignments, scholarship activities, and professional and community service.

Students

When planning program evaluation in the area of students, data should be collected about such areas as student policies, methods of communicating policy changes to students, and opportunities for students to participate in nursing program governance or offer suggestions to faculty. Student services at the parent institution should also be assessed, documenting their availability to nursing students, including students who

study primarily in off hours or via distance education. Accrediting agencies are also interested in student loan default rates and documentation of the strategies the university uses to inform students of their responsibilities to repay loans. Documentation in this area could include policies, lists of services and their hours, and published documents such as student handbooks and bulletins.

Curriculum

The program must be able to document the professional standards used in the development of the curriculum. CCNE requires that programs use the Essentials documents in curriculum development (CCNE, 2013), and ACEN requires that professional standards to be used are appropriate to the competencies necessary for role preparation, although specific standards are not specified (ACEN, 2013).

Evidence should be collected about the process the faculty uses for review of the curriculum for currency and effectiveness. Many nursing programs have some sort of curriculum committee or other body that systematically evaluates the courses within each curriculum. This process should be documented on the evaluation plan with references to minutes of meetings where the results of these evaluations are reported to the larger faculty for possible action or curriculum revision.

In addition to looking at program outcomes required for accreditation, it is important to examine the evaluation methods used in nursing courses. Tanner (2001) suggests asking the following: Are the evaluation methods appropriate for measuring achievement of the outcomes you are hoping to achieve? Are the methods well designed, for example, using multiple-choice tests? Do evaluation methods address areas of best practice—are you preparing your students for contemporary practice by measuring their abilities in real-life practice activities, such as collaborative work in groups, professional speaking, professional writing, and ability to prioritize? Unless you evaluate the quality of measurement of your course outcomes, you will not be able to reliably measure program outcomes (Tanner, 2001).

Student evaluations of specific courses and of the curriculum as a whole are important components of evaluation of the curriculum. The nursing program needs course and faculty evaluations, formative evaluations of student services, and end-of-program comprehensive surveys from both currently enrolled students and those about to graduate. Students may be more willing to complete surveys if they understand the importance of the information to the program. A faculty-led discussion of the use of evaluation data in classes where data are collected, a talk about the importance of program evaluation by faculty or the program director at student group meetings, messages sent via the electronic course learning management system, and individual student e-mails are good ways to convey the need for student participation in evaluation. Some schools have started posting the results of the previous year's evaluation data on Web sites where students can view the data, creating a

culture of evaluation in the program. When they see evidence that data are actually examined and used for decision making, students may be more motivated to complete evaluation surveys.

Incentives can also be used to encourage student participation. Some faculty have a mechanism whereby they are notified by the evaluation system if a student has submitted a course evaluation form, and the faculty withhold final grades until this is done. However, this does not encourage intrinsic motivation for evaluation, and it may be considered unethical, although it is sometimes used as a last resort. Other less controversial incentives might be a donation from the school toward the graduating class gift if a certain percentage of graduates turn in their end-of-program evaluation, or a lunch or snack break for a good response rate for end-of-course evaluations. This provides positive peer pressure for evaluation completion without withholding grades.

Clinical resources should be evaluated for adequacy in size, types of patients, and the overall learning requirement as part of the assessment of whether they are appropriate to help students meet the outcomes of the courses in which they are used. Preceptors, if used, should also be evaluated as part of this process. Both student and faculty evaluations of clinical agencies and preceptors provide useful information and can be included as part of the annual program evaluation data. Often, these are collected on paper or electronically at the end of each semester.

Resources

In addition to evaluation of clinical resources, periodic assessments of adequacy of physical resources are required. Data to be gathered could include class sizes in relation to room size and evaluation of adequacy of laboratory and simulation spaces, including availability of equipment and supplies necessary to meet course outcomes. Some schools do this with a facilities committee; others ask course coordinators about the needs of their students in relation to the physical resources available. It is also important to assess the adequacy of faculty office space, administrative space, storage, and conference room availability. In addition, learning resources such as library resources, computers for students and faculty, and technology support should be assessed. Documentation of these assessments could be recorded in minutes of applicable committee meetings or on paper or electronic forms created for this purpose.

Cost of Programs

Parent institutions may require evaluation of costs for each of its departments. Nursing can be seen as a costly program because of the low faculty-student ratios required for clinical practice. However, students are often drawn to a parent institution because of the presence of a nursing major, whether they complete the major or transfer to another field. Thus, when evaluating the cost of nursing program to assess the true benefits of the program, it is important to present data on the

LYNNE PORTER LEWALLEN

number of students enrolling in the university with an intent to major in nursing, and nursing student enrollment in courses housed in other departments, such as the sciences and liberal arts (Booker & Hilgenberg, 2010). Yet, systematic review on program evaluation concluded that nursing programs often did not have the mechanisms in place to determine whether their programs lost or made money for the parent institution (Horne & Sandmann, 2012). Student enrollment in programs and the importance of or the perceived need for the programs in the community are important factors to consider and can generate data to make decisions about program startups or terminations (Stuart, Erkel, & Shull, 2010).

For academic nursing programs, it is often not simple to calculate the benefits of a program. In a staff development environment, return on investment for specific continuing education programs may be calculated using measures such as reduced infection or reduced patient length of stay (DeSilets, 2010), but for academic programs, the return on investment is often not this straightforward.

Cost-benefit analyses may be difficult to undertake for a nursing education program because although it is straightforward to assess the cost of operating a particular program, it can be challenging to assign a numerical value to the benefit of educational mobility of individuals. However, it is possible to assess cost effectiveness of programs by comparing them to other programs or to the same program delivered in a different manner (Fitzpatrick et al., 2011). A full discussion of cost analysis is beyond the scope of this article, but data can be gathered and analyzed that examine costs related to nursing education programs. For example, a nursing education program may be interested in the cost-effectiveness of conducting clinical education in a specific course using a preceptor model versus a more traditional faculty-led clinical group model. Data to gather would include the following: faculty time, salary, and workload required to staff the clinical group model as compared to faculty time required to orient and interact with preceptors and to visit student/preceptor dyads in various clinical agencies; travel reimbursement for multiple preceptor visits, monetary compensation for preceptor time, if any; clinical agency satisfaction differences between the two education models; availability of qualified preceptors and availability of qualified faculty, student outcomes comparison between the two methods of clinical course delivery; NCLEX passing rate differences between students educated differently, eventual employer satisfaction and retention rates of graduates educated in the different models, and community perceptions of the different models in relation to new student recruitment to the program.

Outcomes

Program Outcomes

Establishing expected levels of achievement (ELA) of program outcomes is an important aspect of the evaluation plan. ELAs should be realistic and appropriate for the program. In determining benchmarks, it is

important to search the literature for evidence, look at what other programs do, and examine data from one's own program (Haleem et al., 2010). Unless regulatory or accrediting bodies mandate a specific ELA, a program may choose to set an ELA that will increase as time goes on, based on interventions the program implements to improve a certain area. For example, many nursing programs have a goal to increase their student retention rate. If a program's current retention rate is 50%, it may be too much to expect to raise it to 75% in 1 year. The program may instead choose a more modest increase, for example, 60%, and in conjunction with this goal put policies or procedures in place to decrease attrition. The effects of these efforts can then be realistically evaluated, and modifications made to increase the ELA to the program's ultimate goal.

Program outcomes are can be measured both quantitatively and qualitatively. Many programs use information about perceived accomplishment of program outcomes from students and graduates, data from employers on the effectiveness of the program's graduates as employees, data on the rates and types of employment of the graduates, pass rates on national examinations, program satisfaction data from graduates, and information from alumni about their perceptions of the program once they have had an opportunity to put their education into practice. Other data to measure outcomes could include course grades on capstone courses, student portfolios, or results of objective clinical capstone exams.

Students and Graduates

It is important to collect evaluation data from students—both those who continue enrollment and graduate and those who leave the program early due to failure or voluntary withdrawal. A variety of methods can be used to collect these data. Surveys, focus groups, and individual interviews are examples of commonly used methods and are discussed earlier. These data should be formally discussed with faculty and aggregated results used to determine if changes are needed in the program. Results of these discussions should be recorded in meeting minutes.

Employment Data

Parent institutions are usually very interested in how many of their graduates are able to find employment after graduation. For nursing programs above the initial licensure level, such as RN-BSN programs and graduate programs, it is also important to know how many graduates have changed employment to a job that requires an advanced degree. At times, these data can be collected before graduation if the student has already secured employment. However, often this information must be collected after graduation, which involves having a mechanism to contact graduates.

Pass Rates on National Examinations

Nursing programs, accrediting bodies, and regulatory agencies are all interested in the pass rate data on national

examinations such as NCLEX and certification examinations. These data are available to schools directly from the testing bodies and are often released on a regular basis. Calculation and reporting of these results annually are part of program outcome data that can be reported to communities of interest. At times nursing programs use nationally normed examinations such as HESI (https://evolve.elsevier.com/studentlife/hesi.html) or ATI (https://www.atitesting.com/Home.aspx) to assess student progress within courses, and may have set benchmarks for achievement. These scores also should be collected and trended as part of program evaluation.

Program Satisfaction Data

Program satisfaction data should be collected from both graduates and employers. For graduates, surveys or focus groups can be used to ask questions about overall satisfaction and also about satisfaction with specific aspects of the nursing program or the parent institution, such as the library services, advisement, or campus organizations. In addition, it is important to ask graduates if they believe they have met the end-ofprogram outcomes. Another important method of assessing whether graduates meet program outcomes is to ask the employers of those graduates. Employer surveys often have a low response rate, for many reasons. Employers are busy, and they may not see the survey as a priority. In addition, employers may not recall which of their employees are graduates of a particular institution. There may be privacy laws that prevent employers from discussing their employees' performance without the employees' specific consent. One strategy is to ask alumni to name their employers and grant permission to contact them for program evaluation.

In addition to, or instead of, seeking feedback from employers of particular graduates, some schools now collect data from employers in other ways. If graduates generally remain in the local area, a survey to the nursing leadership team of the major institutions in the area can provide valuable information. If the survey is distributed at the beginning of a regular meeting and can be collected at the end of the meeting, a good response rate may be attained. Focus groups are another way to collect employer satisfaction data. Some schools hold periodic focus groups of selected representative groups of employers and collect data on employer satisfaction over lunch. This provides a way for the program to share program outcomes and seek input from key stakeholders. an activity which may be required by accrediting bodies. Giving focus group participants some questions ahead of the meeting can generate more useful data. Employer satisfaction data can also be collected from the program's Advisory Board, composed of community and university stakeholders. By making sure that representative employers of graduates are included on the Board, periodic specific satisfaction data can be gathered. Taken together, methods such as these can produce both quantitative and qualitative data that allow the program to assess attainment of program outcomes.

Data From Alumni

Some evaluation criteria require that data be collected from alumni, and some specify a time frame for this. For example, ACEN standards say graduates of the program must be surveyed 6 to 12 months after graduation (ACEN, 2013). Problems with alumni surveys include inaccurate postal or e-mail addresses, and low return rates of surveys. Low return rates may be due to the fact that the surveys are too long (Story et al., 2010). Surveys should ask for the essential information needed to meet program criteria, without asking extraneous information that the program will not use. If a longer survey is necessary, the program might consider placing the essential items first. Surveys can be distributed by postal mail, electronic mail, or by means of an electronic survey hosted on a site (such as Survey Monkey or Qualtrics), with a link to the survey posted on the school's Web site or another Web page frequented by alumni of the program. Story et al. have described setting up Facebook groups for each graduating class at the time of graduation and marketing the page as a way for graduates to keep in touch. These pages can be used to deliver year-specific surveys and other communications. In the first year of using this method, one school's alumni survey response rate went from nearly 0 to 52%.

Several other strategies can be used to gather data from alumni. The alumni association of the nursing program and that of the parent institution can be valuable partners in this endeavor. These groups may have current contact information for alumni (both postal and e-mail addresses) and may send periodic surveys to which questions about the nursing program can be appended. In addition, alumni meetings may be a good place to collect survey or qualitative data from graduates of the program. Professional nursing meetings in the community might also be an avenue through which to contact alumni. Frequently, alumni will contact former faculty members with updates about job changes, graduate school plans, or other professional activities. If a formal mechanism is in place to collect these anecdotal pieces of information about graduates, more complete data on alumni accomplishments can be compiled.

Evaluating the Process

It is important to periodically evaluate the usefulness of the evaluation plan document and update the plan. The end of each year, when evaluation data have been collected and recorded, is a good time to decide whether changes are needed to be made for next year's evaluation process. Escallier and Fullerton (2012) list the following criteria their program uses for assessment of their evaluation protocol: sufficiency (how complete is the program design), usability (how usable are the program materials and processes), currency (does the program meet the needs of today's graduates and employers), compliance (is the nursing program meeting all the requirements of the parent institution and other regulatory and accrediting bodies), and effectiveness (does the

program serve the needs of its constituents). A formal process such as this can be used, or an informal discussion of issues that the evaluation group faced in collecting and aggregating data can be used to identify areas for development of the plan.

Conclusion

Time for evaluation does not just happen. On a day-today basis, there are always "more urgent" things that come up. However, evaluation should become part of the day-to-day work because it is not something one can easily catch up on. If a program has a "master calendar," then put due dates for clinical and preceptor evaluations on the calendar, so they are not forgotten. Put a component of the evaluation plan on the agenda for each faculty meeting to keep evaluation on everyone's minds. Schedule regular e-mail or other announcements to students about evaluation activities, so the importance of evaluation is reinforced to them. Nursing programs have to show commitment to collecting and aggregating data and acting on the evaluation findings, and they also must be willing to openly share findings with stakeholders (Sudhayda & Miller, 2006). Regular and systematic evaluation can strengthen a nursing program and allow it to capitalize on its strengths and improve its weak areas.

References

Accreditation Commission for Education in Nursing [ACEN] (2013). Standards and criteria. Atlanta, GA: Author (Retrieved from: http://www.acenursing.org).

Booker, K., & Hilgenberg, C. (2010). Analysis of academic programs: Comparing nursing and other university majors in the application of a quality, potential and cost model. *Journal of Professional Nursing*, 26, 201–206, http://dx.doi.org/10.1016/j.profnurs.2009.11.002.

Commission on Collegiate Education in Nursing [CCNE] (2013). Standards for accreditation of baccalaureate and graduate degree nursing programs. Washington, DC: Author (Retrieved from: http://www.aacn.nche.edu/ccne-accreditation/Standards-Amended-2013.pdf).

DeSilets, L. D. (2010). Calculating the financial return on educational programs. *The Journal of Continuing Education in Nursing*, 41, 149–150, http://dx.doi.org/10.3928/00220124-20100326-08.

Diefenbeck, C. A., Hayes, E. R., Wade, G. H., & Herrman, J. W (2011). Student-centered outcomes evaluation of the clinical immersion program: Five years later. *Journal of Nursing Education*, 50, 628-635, http://dx.doi.org/10.3928/01484834-20110729-02.

Ellis, P., & Halstead, J. (2012). Understanding the Commission on Collegiate Nursing Education accreditation process and the role of the continuous improvement progress report. *Journal of Professional Nursing*, 28, 18–26, http://dx.doi.org/10.1016/j.profnurs.2011.10.004.

Escallier, L. A., & Fullerton, J. T. (2012). An innovation in design of a School of Nursing evaluation protocol. Nurse Educator, 37, 187–191, http://dx.doi.org/10.1097/NNE.0b013e318262eb15.

Fitzpatrick, J. L., Sanders, J. R., & Worthen, B. R. (2011). Program evaluation: Alternative approaches and practical guidelines. (4th ed.). Boston: Pearson.

Giddens, J. F., & Morton, N. (2010). Report card: An evaluation of a concept-based curriculum. *Nursing Education Perspectives*, 31, 372–377, http://dx.doi.org/10.1043/1536-5026-31.6.372.

Haleem, D. M., Evanina, K., Gallagher, R., Golden, M. A., Healy-Karabell, K., & Manetti, W. (2010). Program evaluation: How faculty addressed concerns about the nursing program. Nurse Educator, 35, 118–121, http://dx.doi.org/10.1097/NNE.0b013e3181d95000.

Hamner, J. B., & Bentley, R. W. (2003). A systematic evaluation plan that works. Nurse Educator, 28, 179–184.

Horne, E. M & Sandmann, L. R. (2012). Current trends in systematic program evaluation of online graduate nursing education: An integrative literature review. *Journal of Nursing Education*, 51, 570–578, http://dx.doi.org/10.3928/01484834-20120820-06.

Jacobs, P. M. & Koehn, M. L. (2004). Curriculum evaluation: Who, when, why, how? *Nursing Education Perspectives*, 25, 30–35.

North Carolina Board of Nursing (2011). Education rules. Raleigh, NC: Author (Retrieved from: http://www.ncbon.com/dcp/i/nursing-education-programs-in-north-carolina-information-and-rules).

Southern Association of Colleges and Schools, Commission on Colleges [SACSCOC] (2012). The principles of accreditation: Foundations for quality enhancement. (5th ed.). Decatur, GA: Author (Retrieved from: http://sacscoc.org/principles.asp).

Stavropoulou, A., & Stroubouki, T. (2014). Evaluation of educational programmes: The contribution of history to modern evaluation thinking. *Health Science Journal*, 8, 193–204.

Story, L., Butts, J. B., Bishop, S. B., Green, L., Johnson, K., & Mattison, H. (2010). Innovative strategies for nursing education program evaluation. *Journal of Nursing Education*, 49, 351–354, http://dx.doi.org/10.3928/01484834-20100217-07.

Stuart, G. W., Erkel, E. A., & Shull, L. H. (2010). Allocating resources in a data-driven college of nursing. Nursing Outlook, 58, 200-206, http://dx.doi.org/10.1016/j.outlook.2010.05.002.

Sudhayda, R., & Miller, J. M. (2006). Optimizing evaluation of nursing education programs. *Nurse Educator*, 31, 200–206.

Tanner, C. A. (2001). Measurement and evaluation in nursing education. *Journal of Nursing Education*, 40, 3-4.